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EDITORIAL COMMENT

The Elderly Are Not So Old Anymore*

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When I am old and greyheaded, O God, forsake me not
Psalms 71:18

One of the greatest challenges in clinical medical practice is altering it as new information becomes available. The constant drive to understand and then apply new material is an overwhelming task, especially in cardiovascular diseases, and far beyond the capacity of any single individual today. The amount of data ("data" in all its varieties and forms) that must be evaluated, reviewed, interpreted, adjusted, reinterpreted, and then carried forward into planned changed behavior require the talents of many individuals all working together (1). This difficulty is in fact just the rationale for forming clinical practice guidelines groups, an

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activity that constitutes one of the very best purposes of professional societies such as the American College of Cardiology (ACC) and the American Heart Association (AHA). To be sure, guidelines themselves are only suggestions for how to approach certain clinical problems and situations. They do not, fortunately, have the force of law, nor should they. No guideline could ever encompass all of the nuances and singularities that make individual clinical cases unique. However, individual cases can be sufficiently similar enough so that guidelines (i.e., organized suggestions) are worthwhile. And periodic updating of guidelines by professional groups is a necessary and desirable way of communicating to everyone a thoughtful analysis of accumulated evidence and a plan for moving it into practice (2,3).

Several very important lessons about this have been learned during the past few years (1–7). First, observers have noted that variations in care exist between geographic areas or between clinical specialties for the same or similar conditions. Second, adoption of evidence-based guidelines recommendations tends to reduce variations in care toward a common approach. Third, reducing variations by using guidelines usually results in better outcomes, that is, lower mortality and/or fewer adverse events. Finally, it has been observed that adoption of guidelines to reduce care variations is not a uniform process either but itself seems to be quite haphazard. One group for which the adoption of guidelines recommendations has been slow and inconsistent is the elderly. The most commonly expressed theme for this hesitancy to make changes has seemed to be the perceived "risk" associated with treatments applied to an elderly population. Too often the dictum of *primum non nocere* wins out. If a treatment (drug or procedure) used in an elderly person might be associated with risk, for example, if administering a platelet-inhibiting agent like clopidogrel in an acute coronary syndrome might be associated with some increased risk of bleeding, then perhaps it is better not to use that treatment. However, what is lost in this syllogism is the fact that in many cases the elderly are at increased risk from the underlying disease too, more so than younger patients, and therefore the potential benefit of a treatment also might be greater for them. Somehow, this possibility of saving more lives or reducing disabilities gets lost or overlooked.

The acute coronary syndromes problem. Every year in this country there are upwards of 5.3 million emergency room visits for chest pain syndromes, with at least 1.4 million hospital admissions for unstable angina (UA) and non–ST-segment elevation myocardial infarction (NSTEMI). In 2002, an ACC/AHA clinical guidelines committee published updated evidence-based recommendations for the treatment of UA/NSTEMI. These recommendations were followed shortly by an initiative to help track implementation of these guidelines, the Can rapid risk stratification of unstable angina patients suppress adverse outcomes with early implementation of the ACC/AHA guidelines (CRUSADE) initiative (8). The guidelines recommendations are not complex or difficult, amounting to evaluation of the patient for the use of certain medications (aspirin, clopidogrel, beta-blockers, heparin or low molecular weight heparin, and platelet glycoprotein IIb/IIIa inhibitors) and one procedure (cardiac catheterization within 48 h). The suggested strategy has even been reduced to convenient algorithms (9). What is now emerging from CRUSADE and other large scale analyses of clinical practice is the finding that these guidelines recommendations are not being implemented widely, and the group most shortchanged is the elderly. Just recently, a large international registry of patients with acute coronary syndromes (both STEMI and NSTEMI), i.e., the GRACE registry, reported significantly decreased use of guidelines recommended therapies in the elderly. (10) And now in this issue of the *Journal*, the CRUSADE registry (11) reports similar findings in much larger numbers.

Opportunity gaps. One of the important things that the CRUSADE group has done in this study was examine for contraindications. Not unexpectedly, contraindications to four of the guidelines medications did increase with increasing age. But although this trend was clearly evident, the actual numbers of patients with contraindications were surprisingly (and gratifyingly) low. More importantly, even

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when adjusted for any contraindications, recommended therapy was still given much less often in the elderly compared with the non-elderly. This gap must be reduced. Another hugely important finding from this study in addition to the medications was the observation that the elderly had early invasive management used in dishearteningly low rates. It's likely that some clustering of treatment patterns exists here because an earlier CRUSADE report noted that there was a correlation between early invasive management and appropriate use of guidelines recommended medications (12). That is, places in which patients were more likely to receive recommended medications also were places in which patients were more likely to get early invasive management. Work that we have done as part of the Thrombolysis In Myocardial Ischemia (TIMI) study group has helped highlight the importance of an early invasive management approach in UA/NSTEMI, an approach that is most especially promising in elderly patients (13). Data from the Fragmin and Fast Revascularization During Instability in Coronary Artery Disease Trial (FRISC) II and Randomized Intervention Trial of unstable Angina (RITA)-3 also support it (14,15). As Alexander et al. (11) point out, increasing the use of an early invasive strategy may be one of the biggest opportunities for improving outcomes for elderly patients with NSTEMI.

Conclusions. We need to invert the current equation so that instead of calculating a "risk score" for acute coronary syndromes, we should instead calculate an "opportunity score." The opportunity score would give an estimate of the benefit to be gained by a treatment or group of treatments. Patients with higher baseline risks from the underlying disease, such as the elderly, would have higher opportunity scores for benefit, even allowing for some of the greater risks from the treatment. Perhaps if we approached it this way, not as "risk" but as "opportunity," we might then feel more comfortable about using the guideline-recommended therapies. We must listen to the psalmist's lament, and we too must not forsake the elderly what is known to be beneficial.

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